

1900.

# Medical Officer's Annual Report.

LIFFORD HOUSE,  
DARTFORD,  
March, 1900.

TO THE  
CHAIRMAN AND MEMBERS OF THE  
DARTFORD URBAN DISTRICT COUNCIL.

GENTLEMEN,

I beg to present my report as Medical Officer of Health for the year 1899.

Population. I estimate the total population at 15,817.

Births registered. There have been 477 births registered during the past year, being an increase of 21 on 1898. Of these 217 were males and 260 were females.

Births in Union Workhouse. There were 15 births in the Union Workhouse and 3 of these belonged to Dartford.

Birth rate. The gross birth rate would therefore be 30·15, and the corrected birth rate 29·39.

Births per quarter. In the following table I give the distribution of births per quarter.

	March quarter.	June quarter.	September quarter.	December quarter.	Total.
Males ...	52	55	66	44	217
Females ...	56	65	64	75	260
Total ...	108	120	130	119	477

Deaths registered. The entire number of deaths registered was 454, being an increase of 176 on last year, which was an increase of 24 on 1897.

The increase is derived from the following divisions of the parish :—

Parish of Dartford ...	...	51
Union Workhouse ...	...	29
Infectious Diseases Hospital ...	...	15
London County Asylum ...	...	79
Hospital Ships ...	...	3
Total ...		177

but there is a decrease in the Cottage Hospital of 1.

Death rate. This gives a gross death rate of 28·70.



By deducting 194 persons who were non-residents but whose deaths were registered in the Dartford district we get a death rate of 16·43.

This 16·43 therefore is the true death rate of the parish of Dartford.

Average birth and death rates for past seven years.

The average birth rate for the past seven years amounts to 31·71 per 1,000, and the death rate for the same period is 16·00.

From the following table which gives the birth and death rates per 1,000 for the past seven years it will be seen that last year we are considerably below the average for births and slightly above the average for deaths.

Year.	Birth rate per 1,000.	Death rate per 1,000.
1893	30·81	16·91
1894	30·00	13·54
1895	34·48	18·80
1896	32·82	16·08
1897	32·86	16·15
1898	30·34	14·13
1899	29·39	16·43

Deaths in public institutions.

The number of deaths in public institutions amounted to 240, being an increase of 125 on last year.

UNION WORKHOUSE.—There were 109 deaths registered from the Union Workhouse. Of these 73 were males and 36 females, also 24 were residents of Dartford, and 85 were from other parishes in the Dartford Union.

COTTAGE HOSPITAL.—From the Livingstone Cottage Hospital 7 deaths were registered, 1 resident and 6 non-residents of Dartford.

BOW ARROW ISOLATION HOSPITAL.—In this institution there were 41 deaths. Of these 21 were residents and 20 were non-residents. 170 patients were sent in from Dartford, being an increase of 128 on the previous year, and the following table gives the number of cases and the deaths in each disease.

	Diphtheria.		Scarlet Fever.		Typhoid Fever.		Totals.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Dartford ... ..	130	19	18	1	12	1	160	21
Union House ...	9	2	—	—	1	—	10	2
Total ... ..	139	21	18	1	13	1	170	23

Out of 130 cases of diphtheria removed to Bow Arrow Hospital, 19 patients died, as against 20 deaths out of 103 cases not removed from their homes, the percentage of deaths among the former being 14·61, while among the latter it was 19·41. This difference in death rate is yet more satisfactory than appears at first sight, as many of the cases when admitted to the Hospital were in an almost hopeless condition and some were only sent in as a last hope of saving the child's life. By far the milder cases were kept at home.



No deaths were reported from the St. Vincent's Industrial School. There were 3 from the Metropolitan Asylums Board Ships at Long Reach—Dr. Ricketts has kindly informed me that he had 11 cases under treatment at the Ships during the year, an increase of 6.

The new asylum at Baldwyns' Park belonging to the London County Council appears to be almost in full occupation and is responsible for 80 deaths. This makes our gross death rate much higher than last year.

The following table gives the number of deaths in public institutions and shows the mortality of residents and non-residents of Dartford in each.

Deaths in public institutions, residents and non-residents.

Registration district.	Residents.	Non-Residents.	Total.
Union Workhouse ... ..	24	85	109
London County Asylum ...	—	80	80
Bow Arrow Isolation Hospital	21	20	41
Cottage Hospital ... ..	1	6	7
Hospital Ships ... ..	—	3	3
Totals ... ..	46	194	240

The total number of deaths registered was 454. 242 males and 212 females, and by the last table we find that 194 were non-residents ; therefore the remaining 260 constitute the real mortality of the town.

Deaths per quarter.

The following table gives the distribution of deaths per quarter :—

Quarter ending	31st March	30th June	30th Sep.	31st Dec.	Totals.
Dartford ... ..	44	35	72	63	214
Public Institutions	36	53	70	81	240
Totals ... ..	80	88	142	144	454

The large increase in the number of deaths in the 3rd quarter is due partly to the prevalence of diarrhœa among children, 17 deaths being registered from that disease.

Deaths of children under 1 year.

84 deaths of children under one year have been registered, as against 73 in 1898. Of these 84 cases, 17 were due to diarrhœa ; 3 to diphtheria ; 7 to bronchitis ; 19 to debility from births ; and 38 from other diseases general among infants.



The following table gives the infant mortality since 1891 :—

1891	60	1894	66	1897	72
1892	79	1895	85	1898	73
1893	84	1896	71	1899	84

The average infant mortality for the past nine years is 74·88.

Deaths from tuberculosis.

There were 24 deaths registered as due to tuberculosis.

I am glad to be able to report that your Building and Sanitary Committee have in contemplation steps to bring the causes of this disease under more direct control, and I trust by next year I shall be able to speak of considerable progress made in this direction. In the meantime I would like to repeat some of my observations on this matter from last year's report. "Tuberculosis is a disease which is due in a large measure to children sleeping in close and badly ventilated rooms and overcrowding, and is also caused by using for food the milk and flesh of animals affected by it. It might to a considerable extent be prevented by attention to the proper ventilation of bed-rooms, by boiling all milk directly it is received into the house and by the thorough cooking of all meat. Isolation also should be strictly carried out."

Deaths from malignant diseases.

16 deaths occurred from malignant diseases, the same number as last year.

Inquests.

The Coroner sat on 14 inquests and five deaths were registered where there was no medical attendant.

Infectious diseases notified.

Under the Infectious Diseases (Notification) Act, 558 cases of infectious disease were notified, as against 318 of last year, which is a very large increase.

The following table gives their distribution with the totals for 1897 and 1898 for comparison :—

Disease.	Dartford.	Union Workhouse	Total for 1899.	Total for 1898.	Total for 1897.
Diphtheria ... ..	234	8	242	42	27
Scarlet fever ... ..	44	1	45	22	19
Membranous Croup ...	—	—	—	1	2
Measles ... ..	212	2	214	206	118
Typhoid fever ... ..	23	2	25	10	11
Puerperal fever ... ..	—	2	2	—	2
Erysipelas ... ..	28	2	30	37	36
Total ..	541	17	558	318	215

Small-pox.

It with great pleasure I am able to report that no case of small-pox was notified from your district during the past year. I am equally pleased to



**Vaccination.** report that the Vaccination Act, lately introduced, has been working most satisfactorily, a much larger number of children being vaccinated than under the old Act.

**Diphtheria.** There has been a very large increase in the number of cases of diphtheria during the past year. 242 cases were notified, being 199 in excess of 1898. The following table gives the number of cases reported to me for each month :—

January	...	19	July	...	8
February	...	28	August	...	22
March	...	21	September	...	21
April	...	14	October	...	21
May	...	26	November	...	26
June	...	18	December	...	18
				Total	<u>242</u>

The following table gives the street list distinguishing between the higher and lower parts of the town :—

HIGHER GROUND.				LOWER GROUND.			
Brent	...	...	3	East Hill (Lower)	...	...	5
Fulwich Lane	...	...	2	Lowfield Street	...	...	10
Fulwich Road	...	...	22	Hadlow Place	...	...	7
East Hill (Upper)	...	...	8	Heath Street	...	...	4
St. Alban's Road	...	...	12	South Street	...	...	3
St. Martin's Road	...	...	3	High Street	..	...	9
Colney Road	...	...	4	Spital Street	...	...	3
Great Queen Street	...	...	9	Orchard Street	...	...	5
Little Queen Street	...	...	1	Kent Road	...	...	1
Gladstone Road	...	...	16	Spring Vale	...	...	5
Darenth Road	...	...	6	Overy Street	...	...	2
Mount Pleasant Road	...	...	5	Home Gardens	...	...	5
Dartford Road	...	...	23	Hythe Street	...	...	15
Blenheim Road	...	...	5	Gas Lane	..	...	1
Wellington Road	...	...	1	Creek Mill Cottages	...	...	3
West Hill	...	...	19				
Union House	...	..	8				
Tower Road	...	...	4				
Highfield Road	...	...	5				
Heath	...	...	2				
Oakfield Lane	...	...	3				
Shepherd's Lane	...	...	1				
Summerhill Road	...	...	2				
Total			<u>164</u>	Total		...	<u>78</u>

After a careful analysis of the various cases for the past and former years, I have come to the conclusion that the spread of the disease is due altogether to direct infection from patient to patient. To satisfactorily combat this, the efficient disinfecting of all clothing, &c., with which the patient has come in contact is in my opinion essential, and I am sure the disinfecting chamber about to be erected, and to which I refer later on, will greatly help to this end.



I might also here refer to the usual habit of slate cleaning in schools, which should be condemned, and would suggest that suitable sponges and water be provided for that purpose.

Contributory to the facility with which it is transmitted might be classed damp and insanitary dwellings; overcrowding and the keeping of pigeons, fowls and rabbits close to the house. I therefore think that if proper care is exercised it is a disease which should not be difficult to stamp out.

In its milder forms Diphtheria is not readily recognized; in fact in many cases it can only be detected by a careful bacteriological examination.

In several cases coming under my notice which presented only an inflamed throat I found the diphtheria bacillus present, and that consequently the patient was in a condition to spread the disease.

This to my mind accounts for the frequent outbreaks in the various schools.

I also found in cases presented to me for examination previous to admission to the schools, that, even weeks after being certified by the medical attendant as free from the disease, some still showed the diphtheria bacillus to be present.

This therefore is the difficulty. I should advise that a complete bacteriological examination be made in each case by the medical man in attendance and that no child be admitted to the schools without a certificate to that effect.

I would also suggest that the Council be prepared to make good to the medical men of the district the costs incurred by such bacteriological examination.

I was glad to have a visit from Dr. R. Deane Sweeting, Inspector of the Local Government Board, who amongst other things made a thorough enquiry into the subject of diphtheria, and his advice and assistance were most valuable.

Scarlet fever.

I am sorry to have to report 45 cases notified as suffering from scarlet fever, being an increase of 23 on last year. This was partly due to the fact that it appeared in conjunction with diphtheria in several cases and was not recognized at first, but when the children had gone back to school free from diphtheria they were discovered to be convalescent from scarlet fever. Thus the infection was spread. 18 cases were removed for isolation.

Typhoid fever.

Typhoid fever also shows a considerable increase, there being 25 cases notified as against 10 of last year.

Two occurred in the London County Asylum on Dartford Heath, 2 in a house which was considered unfit for habitation. In two instances it re-appeared in the same houses after some period had elapsed. In one house the drains were blocked, and one case was reported from the Union Workhouse. In the remaining cases I could find no sufficient cause, and except in the two above mentioned there did not seem to be any connection.



Measles.

There were 214 cases of measles notified during the year, an increase of 8 on last year. We began the year with a severe epidemic which had commenced in November of 1898, and persisted right through the whole year and again sprang into life in December.

The following table gives the number of cases of notifiable disease notified during each month of the year :—

Month.	Scarlet fever.	Diphtheria	Enteric fever.	Measles.	Erysipelas	Puerperal fever.	Total.
January ...	3	19	—	53	2	—	77
February	3	28	—	19	2	—	52
March ...	—	21	1	17	1	—	40
April ...	—	14	—	7	3	—	24
May ...	—	26	—	4	2	—	32
June ...	—	18	—	10	3	—	31
July ...	—	8	1	36	1	—	46
August ...	4	22	3	16	2	—	47
September	5	21	1	5	1	2	35
October ...	8	21	4	3	6	—	42
November	10	26	12	10	4	—	62
December	12	18	3	34	3	—	70
Totals ...	45	242	25	214	30	2	558

Summer diarrhœa.

17 deaths were registered as due to summer diarrhœa, being the same number as last year.

Disinfecting.

I have had all the drains belonging to houses in which diphtheria and typhoid fever occurred carefully examined and tested with the smoke test.

The dust bins were more frequently emptied and disinfecting powder freely used, and the houses fumigated with sulphur and in several cases lime-washed.

Disinfecting chamber

Owing to the impossibility of properly disinfecting clothing, &c., from infected houses by means of sulphur, and as many cases of re-appearance of diseases have been due to this cause alone, the Urban District Council in conjunction with the other parishes of the Dartford Union have decided to erect a proper disinfecting chamber, which will soon be accomplished.

Flushing of w.c.'s.

As it was found that the large number of hand flushed w. c.'s which existed in the town were not kept in a sanitary condition the Urban District Council obtained powers to compel owners to have water laid on for flushing purposes.



This is now being carried out in a systematic manner.

Dairies and  
Cowsheds.

With Mr. Harston, the Inspector of Nuisances, I visited all the dairies and cow-sheds, which were with one exception in a fairly satisfactory state. Greater attention should be paid to cleanliness and the more frequent removal of manure. In one case we found that a number of pigs were kept. Owing to the growing tendency to import milk from a distance I consider more stringent regulations should exist, as this removal of milk from one district to another is a potent factor in the spread of disease, for which we have at present no adequate protection such as exists in the case of animals coming from infected districts. In my opinion this is a very important subject and, as I mentioned before, is having very serious attention: to a large extent child life is dependent on a healthy milk supply.

Slaughter Houses.

With Mr. Harston I also visited all the slaughter houses, which were in a fairly satisfactory condition.

Lodging Houses.

We also visited the various lodging houses.

Cranpit.

The work on the Cranpit has been successfully carried out. This removes a serious source of danger.

Water Supply.

The bacteriological and chemical reports of the Metropolitan Water Supply have been carefully followed.

Gipsy Vans.

The gipsy vans are still a source of danger to the town from the absence of sanitary conveniences.

Overcrowding.

Overcrowding still exists, but is steadily disappearing as an increasing number of new houses are being erected. All cases notified to me as dangerous to health have been visited, reported upon and remedied.

Inspector of  
Nuisances' Report.

The following is the Sanitary Inspector's report for the year:—

“ Notices have been served for the abatement of nuisances in 348 houses.

Flushing cisterns have been fitted to the w. c.'s of 466 houses.

Four houses have had the water laid on.

There have been cases of overcrowding in 9 houses.

109 houses have been connected to the main sewer, together with the drainage of 5 other large Institutions.”

I remain,

Gentlemen,

Yours truly,

J. HAMILTON.







Area and Population of the District or Division to which this Return relates.

Area in Acres 4,251.332.	Death Rates.	General 29.39.	{ per 1,000	Population, esti-
Population (Last Census) 11,906.		Corrected 16.43	{ mated to middle of 1899.	
” (Estimated to middle of 1899) 15,817.		Infant (under one year of age) 176.10	{ per 1,000	Births Registered.

TABLE OF POPULATION, BIRTHS, AND OF NEW CASES OF INFECTIOUS SICKNESS, coming to the knowledge of the Medical Officer of Health, during the year 1899, in the Urban Sanitary District; classified according to Diseases, Ages and Localities.

NAMES OF LOCALITIES adopted for the purpose of these Statistics; Public Institutions being shown as separate Localities.	Population at all ages.		Registered Births.	Aged under 5 or over 5.	New cases of sickness in each locality, coming to the knowledge of the Medical of Health.						Number of such cases removed from their homes in the several Localities for treatment in Isolation Hospital.			
	Last Census.	Estimated to middle of 1-99.			Scarlatina.	Diphtheria.	Fevers.		Erysipelas.	Measles.	Scarlatina.	Diphtheria.	Enteric or Typhoid Fever.	
							Enteric or Typhoid.	Puerperal.						
Parish of Dartford ....	11368	14250	462	Under 5. 5 upwards.	43	233	21	—	—	27	212	18	130	12
Union Workhouse....	328	543	15	Under 5. 5 upwards.	1	8	2	2	—	2	2	—	9	1
London County Asylum ....	—	804	—	Under 5. 5 upwards.	1	—	2	—	—	—	—	—	—	—
Livingstone Cottage Hospital	—	—	—	Under 5. 5 upwards.	—	1	—	—	1	—	—	—	—	—
Bow Arrow Hospital ....	—	—	—	Under 5. 5 upwards.	—	—	—	—	—	—	—	—	—	—
St. Vincent's School ....	210	220	—	Under 5. 5 upwards.	—	—	—	—	—	—	—	—	—	—
TOTALS	11906	15817	477	Under 5. 5 upwards.	45	242	25	—	2	30	214	18	139	13

